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United States General Accounting Office

GAO

Report to the Chairman, Committee on Armed Services, U.S. Senate

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MILITARY CAPABILITY

An Assessment of Changes of Measures Between Fiscal Years 1980 and 1989

GAO/NSIAD-90-143

GAO

United States
General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

B-217229

May 10, 1990

The Honorable Sam Nunn
Chairman, Committee on
Armed Services
United States Senate

Dear Mr. Chairman:

As you requested, we reviewed the changes in the status of military force capabilities for fiscal years 1980 through 1989. The Department of Defense (DOD) was provided about $2.4 trillion during that time, marking it as the largest increase ever in peacetime defense funding. Specifically, this report describes the changes in key measures and indicators that DOD has traditionally associated with the four pillars of military capability: force structure, modernization, readiness, and sustainability. It focuses on areas where progress has been made and where deficiencies remain. Our work is summarized below. A classified version of this report (GAO/C-NSIAD-90-22) is being provided to you separately and contains details of the issues discussed here.

Background

DOD defines military capability as the ability of the force to achieve a wartime objective, such as winning a battle or war or destroying a target. The four pillars are defined as follows:

- Force Structure: the numbers, size, and composition of units constituting the military forces. Force structure is usually described in numbers of divisions, ships, or wings.
- Modernization: the technical sophistication of forces, units, weapon systems, and equipment. Modernization can include new procurement and/or modifications, depending on the service.
- Readiness: the ability of the military forces, units, weapon systems, or equipment to fulfill their designated purpose. Readiness is measured in terms of manning, equipping, and training the force.
- Sustainability: the staying power of military forces, or how long the forces can continue to fight. Sustainability involves the ability to resupply engaged forces during combat operations.

DOD uses many measures to monitor or describe capability changes in its forces. For example, adequate numbers of qualified personnel are an important indicator of military capability. Modern equipment and the need to train personnel to operate and maintain it are also important.

These measures are subject to limitations since none of them directly measure military capability. However, they do represent a common set of data DOD has used to report on the capability of its forces. Our assessment of these measures covered fiscal years 1980 through 1989. All fiscal year 1989 data are based on DOD estimates.

In some cases, the services did not have data for the entire period covered by our review. Also, alternative or additional measures were developed during the period. In these cases, we report data showing the first and most recent available year. We did not independently verify the accuracy of data provided. Our review was based on military requirements at the end of fiscal year 1989, and does not reflect changes that have occurred as a result of recent world events.

Results in Brief

We found that DOD selectively expanded force structure, purchased large numbers of modern weapon systems and equipment, improved force readiness, and to a lesser extent improved sustainability. DOD's key gains have been in improving force readiness and fielding new and more capable weapon systems.

Our assessment also shows that most types of weapon systems and equipment inventories did not increase significantly. Further, certain readiness indicators raise concerns, such as the percentage of Army Reserve units that are inadequately resourced and trained to carry out their wartime mission. In addition, the increased depot maintenance financial backlog, although not considered a readiness indicator by DOD, is a factor that can affect mission capable and cannibalization rates. Also, significant shortages exist in all the services for certain key sustainability items, and adequate airlift does not exist to meet major contingencies.

Analysis of Changes in Measures of Military Capability

Significant changes that have occurred in measures and indicators of military capability are discussed below. Overall, it appears that improvements have been made in each of the four pillars of capability, although some areas of concern remain.

Force Structure and Modernization

In general, the size of the military force structure, with the exception of the growth in the Navy and reserve components, increased little between fiscal years 1980 and 1989. However, a number of key changes

did occur in the configuration of each of the military services. The procurement and fielding of modern weapon systems also resulted in significant changes, although in most cases inventory levels remained at about 1980 levels. For example:

- The Army's overall force structure increased from 24 to 28 divisions, including 5 new light divisions. Although the number of personnel assigned to Army divisions increased in total, the average number of personnel per division decreased. Reliance on reserve forces increased as the number of reserve personnel increased by about 196,000, and active force personnel decreased by about 5,000. In addition, the Army's tank inventory was modernized with the fielding of 4,762 M1 tanks and 5,153 M60A3 tanks and the phasing out of 4,854 M48 and M60 tanks.
- The Navy moved towards achieving its goal of 600 ships, increasing from 479 deployable battle force ships in 1980 to a projected total of 568 ships in 1989. However, the Navy had a shortfall of anti-air warfare cruisers and destroyers needed to protect its carrier battle groups.
- The inventory of tactical aircraft was modernized with the addition of 144 F-14 and 278 F/A-18 primary authorized tactical aircraft and the phasing out of 211 A-7 and 203 F-4 aircraft. The number of aircraft carrier air wings increased from 14 to 15.
- The Air Force currently has 35 active and reserve tactical fighter wing equivalents, compared to 31 wings in 1981. The inventory of active tactical aircraft was modernized with the addition of 108 F-15 and 575 F-16 aircraft and the phasing out of 636 F-4 aircraft.
- Major changes affecting strategic air forces were the deployment of the Peacekeeper missile, B1-B bomber, and increases in the number of nuclear warheads. Even though airlift capability increased from about 27 to 48 million ton miles per day, it is below DOD's goal of 66 million ton miles per day.
- There are about 13,000 more active duty Air Force personnel today than in 1980. However, this is about 37,000 less than in 1986 when the number of active duty Air Force personnel reached its highest level in the period.
- The Marine Corps force structure is about the same today as it was in 1980. It has three active divisions, three active air wings, one reserve division, and one reserve air wing. The Marine Corps active end strength increased by about 8,500 personnel, while the reserve forces increased by about 7,900. Equipment inventory levels remained about the same, although older systems were replaced with more modern ones, such as the F/A-18 and AV-8B aircraft.

Readiness

Overall, key military readiness indicators, such as mission capable rates, unit resources and training status, and personnel quality, showed marked improvement. However, the resource and training status of reserve components continues to provide reason for concern. Depot maintenance financial backlogs, a factor that provides insight into the general state of materiel readiness, have increased. For example:

- The status of units adequately resourced and trained to carry out their wartime mission has improved or remained at high levels since 1985. The greatest gains were in combat support and combat service support units, although they still generally lag behind combat units. However, Army Reserve units, while showing improvement, lag significantly behind active units. The resource and training status of Army Reserve units raises concern because of the increased reliance placed on them to augment the active forces in the event of a major conflict.
- DOD has frequently cited increased personnel quality as one of its significant accomplishments. Personnel quality indicators, such as test scores on the Armed Forces Qualification Test and the number of high school graduate enlistees, show significant improvement. For example, high school graduates represented 68 percent of DOD's enlistments in fiscal year 1980 and 93 percent in fiscal year 1988.
- Training indicators showed little change, except for Air Force tactical flying hours and Army battalions rotated through training centers. Army and Navy flying hours remained relatively constant, while Navy steaming days decreased for deployed ships and remained virtually unchanged for nondeployed ships.
- Materiel readiness indicators, such as shipboard inventory supply responsiveness, mission capable rates, and cannibalization rates of aircraft spare parts, have improved. However, depot maintenance financial backlogs in the Army and Air Force are increasing. In the Army, for example, depot maintenance financial backlog as a percentage of funding is above 1980 levels. According to DOD, the readiness impact of maintenance backlogs is reflected in other measures, such as mission capable and cannibalization rates.

Sustainability

DOD's ability to sustain its forces during a conflict has improved since 1980. However, this pillar has not progressed as far as the others. Significant shortages exist in key sustainability areas. For example:

- Shortages exist in munitions, such as air-to-air and air-to-ground missiles in the Air Force and Navy. The unified commanders have identified such shortages as a key concern.

- Army inventories of war reserve stocks increased slightly for most supply categories. However, in some cases, requirements for those stocks have increased significantly. Consequently, the percentage of required stocks in inventory is less than it was in 1985.
- The Air Force showed marked improvement in the number of tactical sorties and airlift flying hours that can be sustained by the inventory of spare and repair parts. However, airlift capabilities are still approximately 18 million ton miles per day short of DOD's 66 million ton miles per day goal.

Agency Comments and Our Evaluation

DOD generally concurred with our report, and its comments are presented in appendix I. Most of DOD's comments concerned technical changes and clarifications. However, DOD did raise three substantive concerns. First, it said that depot maintenance backlog is a financial number and should not be characterized as a readiness indicator. Second, DOD provided revised data for prepositioning of materiel configured to unit sets. Third, DOD pointed out that the airlift requirement is a DOD requirement, not an Air Force requirement.

We have revised the report to incorporate DOD's comments and revised data. We have also incorporated DOD's suggested technical changes and clarifications in the text.

We conducted this review from November 1988 to August 1989 in accordance with generally accepted government auditing standards.

Unless you announce its contents earlier, we plan no further distribution of this report until 10 days from its issue date At that time, we will send copies to the Secretaries of Defense and the Army, Navy, and Air Force. We will make copies available to other parties upon request.

This report was prepared under the direction of Donna M. Heivilin, Director, Logistics Issues (202) 275-8412. Other major contributors are listed in appendix II.

Sincerely yours,

Frank C. Conahan

Frank C. Conahan
Assistant Comptroller General

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Comments From the Department of Defense

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301-1800

PROGRAM ANALYSIS AND EVALUATION

February 20, 1990

Mr. Frank C. Conahan
Assistant Comptroller General
National Security and
International Affairs Division
U.S General Accounting Office
Washington, D.C. 20548

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to General Accounting Office (GAO) Draft Report, "Military Capability: An Assessment of Changes in Measures of Capability Between Fiscal Years 1980 and 1989," dated November 27, 1989, (GAO Code 391624), OSD Case 8190. The Department generally concurs with the report.

Most of the Department's comments are technical changes and clarifications and have been provided seperately in an annotated copy of the report. There are three substantive comments the DoD would like to emphasize. The first is that "depot maintenance backlog" is not a readiness measure, but rather is a financial number (requirement vs. funding). Secondly, the Department has provided the GAO with updated information on the Prepositioning of Materiel Configured to Unit Sets (POMCUS) program. Finally, the requirement for airlift is a DoD requirement, not Air Force, and is 66 million ton miles per day.

Detailed DoD comments on the report findings are enclosed. As indicated, additional technical comments were separately provided to the GAO.

Sincerely,

Herbert C. Puscheck
Deputy Assistant Secretary of Defense
(General Purpose Programs)

Enclosure

UPON REMOVAL OF ENCLOSURE DOCUMENT
SECURITY CLASSIFICATION

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